



SEQUENCE LISTING

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<120> BIOENGINEERED VEHICLES FOR TARGETED NUCLEIC ACID
DELIVERY

<130> 23611-A USA

<140> As yet unassigned
<141> 2001-06-25

<150> 60/213,653
<151> 2000-06-23

<160> 51

AB
<170> PatentIn Ver. 3.1

<210> 1
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<212> PRT
<213> Homo sapiens

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1 5 10 15
Arg Arg

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1 5 10 15

Lys Ala Pro Lys Ser Pro Ala Lys Ala Lys
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<213> Adenovirus

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Ser Gly Pro Ser Asn Thr Pro Pro Glu Ile
1 5 10

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<213> Human papillomavirus

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1 5 10

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1 5 10

<210> 7
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<212> PRT

<213> Human papillomavirus

<400> 7

Lys Cys Asp Ser Thr Leu Arg Leu Cys Val Gln Ser Thr His Val Ile
1 5 10 15

Arg Thr Leu

<210> 8

<211> 10

<212> PRT

<213> Human papillomavirus

<400> 8

Gly Thr Leu Gly Ile Val Cys Pro Ile Cys
1 5 10

<210> 9

<211> 10

<212> PRT

<213> Epstein-Barr Virus

<400> 9

Asp Thr Pro Leu Ile Pro Leu Thr Ile Phe
1 5 10

<210> 10

<211> 15

<212> PRT

<213> Epstein-Barr Virus

<400> 10

Pro Arg Ser Pro Thr Val Phe Tyr Asn Ile Pro Pro Met Pro Leu
1 5 10 15

<210> 11

<211> 9

<212> PRT

<213> Epstein-Barr Virus

<400> 11

Phe Leu Arg Gly Arg Ala Tyr Gly Leu

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<210> 12
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<213> Epstein-Barr Virus

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<210> 13
<211> 10
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<213> Epstein-Barr Virus

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Glu Glu Asn Leu Leu Asp Phe Val Arg Phe
1 5 10

<210> 14
<211> 9
<212> PRT
<213> Epstein-Barr Virus

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Ile Val Thr Asp Phe Ser Val Ile Lys
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<213> Homo sapiens

<400> 15
Leu Leu Gly Arg Asn Ser Pro Glu Val
1 5

<210> 16
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<212> PRT
<213> Murine sarcoma virus

<400> 16
Lys Leu Val Val Val Gly Ala Arg Gly Val Gly Lys Ser
1 5 10

<210> 17
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<212> PRT
<213> Homo sapiens

<400> 17
Lys Leu Val Val Val Gly Ala Val Gly Val Gly Lys
1 5 10

<210> 18
<211> 16
<212> PRT
<213> Homo sapiens

<400> 18
Asp Ile Leu Asp Thr Ala Gly Leu Glu Glu Tyr Ser Ala Met Arg Asp
1 5 10 15

ω¹³
<210> 19
<211> 8
<212> PRT
<213> Homo sapiens

<400> 19
Gly Leu Glu Glu Tyr Ser Ala Met
1 5

<210> 20
<211> 10
<212> PRT
<213> Homo sapiens

<400> 20
Glu Leu Val Ser Glu Phe Ser Arg Met Ala
1 5 10

<210> 21
<211> 15

<212> PRT

<213> Homo sapiens

<400> 21

His Leu Asp Met Leu Arg His Leu Tyr Gln Gly Cys Gln Val Val
1 5 10 15

<210> 22

<211> 15

<212> PRT

<213> Homo sapiens

<400> 22

Ser Arg Leu Leu Gly Ile Cys Leu Thr Ser Thr Val Gln Leu Val
1 5 10 15

<210> 23

<211> 9

<212> PRT

<213> Homo sapiens

<400> 23

Glu Ala Asp Pro Thr Gly His Ser Tyr
1 5

<210> 24

<211> 10

<212> PRT

<213> Homo sapiens

<400> 24

Leu Leu Asp Gly Thr Ala Thr Leu Arg Leu
1 5 10

<210> 25

<211> 9

<212> PRT

<213> Homo sapiens

<400> 25

Tyr Leu Glu Pro Gly Pro Val Thr Ala
1 5

<210> 26
<211> 9
<212> PRT
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Met Leu Leu Ala Val Leu Tyr Cys Leu
1 5

<210> 27
<211> 9
<212> PRT
<213> Homo sapiens

<400> 27
Tyr Met Asn Gly Thr Met Ser Gln Val
1 5

<210> 28
<211> 9
<212> PRT
<213> Homo sapiens

<400> 28
Tyr Met Asn Gly Thr Met Ser Glu Val
1 5

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<212> PRT
<213> Homo sapiens

<400> 29
Ala Ala Gly Ile Gly Ile Leu Thr Val Ile Leu Gly Val Leu Leu Leu
1 5 10 15
Ile Gly Cys Trp Tyr
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<210> 30
<211> 9
<212> PRT
<213> Simian virus 40

<400> 30
Thr Pro Pro Lys Lys Lys Arg Lys Val
1 5

<210> 31
<211> 14
<212> PRT
<213> Homo sapiens

<400> 31
Lys Lys Ser Ala Lys Lys Thr Pro Lys Lys Ala Lys Lys Pro
1 5 10

<210> 32
<211> 26
<212> PRT
<213> Homo sapiens

<400> 32
Ala Lys Lys Ala Lys Ser Pro Lys Lys Ala Lys Ala Ala Lys Pro Lys
1 5 10 15
Lys Ala Pro Lys Ser Pro Ala Lys Ala Lys
20 25

<210> 33
<211> 18
<212> PRT
<213> Homo sapiens

<400> 33
Ser Arg Ser Arg Tyr Tyr Arg Gln Arg Gln Arg Ser Arg Arg Arg Arg
1 5 10 15
Arg Arg

<210> 34
<211> 255
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Human/murine
chimeric single chain binding polypeptide (C6.5
sFv)

<400> 34

Gln Val Gln Leu Leu Gln Ser Gly Ala Glu Leu Lys Lys Pro Gly Glu
1 5 10 15Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
20 25 30Trp Ile Ala Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Tyr Met
35 40 45Gly Leu Ile Tyr Pro Gly Asp Ser Asp Thr Lys Tyr Ser Pro Ser Phe
50 55 60Gln Gly Gln Val Thr Ile Ser Val Asp Lys Ser Val Ser Thr Ala Tyr
65 70 75 80Leu Gln Trp Ser Ser Leu Lys Pro Ser Asp Ser Ala Val Tyr Phe Cys
85 90 95Ala Arg His Asp Val Gly Tyr Cys Ser Ser Ser Asn Cys Ala Lys Trp
100 105 110Pro Glu Tyr Phe Gln His Trp Gly Gln Gly Thr Leu Val Thr Val Ser
115 120 125Ser Gly Gly Gly Ser Gly Gly Ser Gly Gly Gly Ser
130 135 140Gln Ser Val Leu Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln
145 150 155 160Lys Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Asn Asn
165 170 175Tyr Val Ser Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu
180 185 190Ile Tyr Gly His Thr Asn Arg Pro Ala Gly Val Pro Asp Arg Phe Ser
195 200 205Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Phe Arg
210 215 220

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asp Ser Leu
 225 230 235 240

Ser Gly Trp Val Phe Gly Gly Thr Lys Leu Thr Val Leu Gly
 245 250 255

<210> 35
 <211> 765
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Human/murine
 chimeric single chain binding polypeptide (C6.5
 sFv)

<400> 35
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 tcctgttaagg gttctggata cagcttacc agctactgga tcgcctgggt gcccagatg 120
 cccggaaag gcctggagta catggggctc atctatcctg gtgactctga caccataac 180
 agcccgtcct tccaaggcca ggtcaccatc tcagtcgaca agtccgtcag cactgcctac 240
 ttgcaatgga gcagtctgaa gccctcgac agcgcgtgt attttgtgc gagacatgac 300
 gtggatatt gcagtagtgc caactgcgc aagtggctg aatacttcca gcattgggc 360
 cagggcaccc tggtcaccgt ctcctcaggt ggaggcgggt caggcggagg tggctctggc 420
 ggtggcgat cgcagtctgt gttgacgcag ccgcctcag tgtctgcggc cccaggacag 480
 aaggtcacca tctcctgctc tggaaagcagc tccaacattg ggaataatta tgtatcctgg 540
 taccagcagc tcccaggaac agccccaaa ctccatct atggcacac caatcgcccc 600
 gcagggttcc ctgaccgatt ctctggctcc aagtctggca cctcagcctc cctggccatc 660
 agtgggttcc ggtccgagga tgaggctgat tattactgtc cagcatggga tgacagcctg 720
 agtgggttggg tgttcggcgg agggaccaag ctgaccgtcc taggt 765

<210> 36
 <211> 269
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Human/murine
 chimeric single chain binding polypeptide (C6ML3-9
 sFv')

<400> 36
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
 1 5 10 15

Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr

20

25

30

Trp Ile Ala Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Tyr Met
35 40 45

Gly Leu Ile Tyr Pro Gly Asp Ser Asp Thr Lys Tyr Ser Pro Ser Phe
50 55 60

Gln Gly Gln Val Thr Ile Ser Val Asp Lys Ser Val Ser Thr Ala Tyr
65 70 75 80

Leu Gln Trp Ser Ser Leu Lys Pro Ser Asp Ser Ala Val Tyr Phe Cys
85 90 95

Ala Arg His Asp Val Gly Tyr Cys Ser Ser Ser Asn Cys Ala Lys Trp
100 105 110

Pro Glu Tyr Phe Gln His Trp Gly Gln Gly Thr Leu Val Thr Val Ser
115 120 125

Ser Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser
130 135 140

Gln Ser Val Leu Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln
145 150 155 160

Lys Val Thr Ile Ser Cys Ser Gly Ser Ser Asn Ile Gly Asn Asn
165 170 175

Tyr Val Ser Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu
180 185 190

Ile Tyr Asp His Thr Asn Arg Pro Ala Gly Val Pro Asp Arg Phe Ser
195 200 205

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Phe Arg
210 215 220

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ser Trp Asp Tyr Thr Leu
225 230 235 240

Ser Gly Trp Val Phe Gly Gly Thr Lys Leu Thr Val Leu Gly Ala
245 250 255

Ala Ala His His His His His Gly Gly Gly Cys
260 265

<210> 37
 <211> 807
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:Human/murine
 chimeric single chain binding polypeptide (C6ML3-9
 sFv')

<400> 37
 caggtgcagc tggtcagtc tggggcagag gtgaaaaagc cggggagtc tctgaagatc 60
 tcctgttaagg gttctggata cagcttacc agctactgga tcgcctgggt gcccagatg 120
 cccggaaag gcctggagta catgggctc atctatcctg gtactctga caccaatac 180
 agcccgctct tccaaggcca ggtcaccatc tcagtcgaca agtccgtca gactgcctac 240
 ttgcaatgga gcagtctgaa gccctcggac agcggcgtgt attttgc gagacatgac 300
 gtggatatt gcagtagttc caactgcgc aagtggctg aataacttcca gcattgggc 360
 cagggcaccc tggtcacccgt ctccctcaggt ggaggcgggt caggcggagg tggctctggc 420
 ggtggcggat cgcagtcgt gttgacgcag cgcgcctcag tgcgtgcggc cccaggacag 480
 aaggtcacca tctcctgctc tggaagcagc tccaacattg ggaataatta tgtatcctgg 540
 taccagcagc tcccaggaac agccccaaa ctccatct atgatcacac caatcgcccc 600
 gcaggggtcc ctgaccgatt ctctggctcc aagtctggca cctcagcctc cctggccatc 660
 agtgggttcc ggtccgagga tgaggctgat tattactgtg cctcctggga ctacaccctc 720
 tcgggctggg tggtcggcgg aggaaccaag ctgaccgtcc taggtgcggc cgcacaccat 780
 catcaccatc acggtggtgg cggctgc 807

<210> 38
 <211> 282
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:Human/murine
 chimeric single chain binding polypeptide
 (C6ML-3-9sFv'-L1-KDEL)

<400> 38
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
 1 5 10 15

Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
 20 25 30

Trp Ile Ala Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Tyr Met
 35 40 45

Gly Leu Ile Tyr Pro Gly Asp Ser Asp Thr Lys Tyr Ser Pro Ser Phe

50 55 60

Gln Gly Gln Val Thr Ile Ser Val Asp Lys Ser Val Ser Thr Ala Tyr
 65 70 75 80

Leu Gln Trp Ser Ser Leu Lys Pro Ser Asp Ser Ala Val Tyr Phe Cys
 85 90 95

Ala Arg His Asp Val Gly Tyr Cys Ser Ser Ser Asn Cys Ala Lys Trp
 100 105 110

Pro Glu Tyr Phe Gln His Trp Gly Gln Gly Thr Leu Val Thr Val Ser
 115 120 125

Ser Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser
 130 135 140

Gln Ser Val Leu Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln
 145 150 155 160

Lys Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Asn Asn
 165 170 175

Tyr Val Ser Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu
 180 185 190

C13

Ile Tyr Asp His Thr Asn Arg Pro Ala Gly Val Pro Asp Arg Phe Ser
 195 200 205

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Phe Arg
 210 215 220

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ser Trp Asp Tyr Thr Leu
 225 230 235 240

Ser Gly Trp Val Phe Gly Gly Thr Lys Leu Thr Val Leu Gly Ala
 245 250 255

Ala Ala His His His His Gly Gly Gly Cys Leu Glu Ser
 260 265 270

Ser Ser Ser Gly Ser Glu Lys Asp Glu Leu
 275 280

<210> 39

<211> 846

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Human/murine
chimeric single chain binding polypeptide
(C6ML-3-9sFv'-L1-KDEL)

<400> 39

caggtgcagc tggtcagtc tggggcagag gtgaaaaagc ccggggagtc tctgaagatc 60
tcctgttaagg gttctggata cagcttacc agctactgga tcgcctgggt ggcgcagatg 120
cccgggaaag gcctggagta catggggctc atctatcctg gtgactctga caccaaatac 180
agcccgtcct tccaaggcca ggtcaccatc tcagtcgaca agtccgtcaq cactgcctac 240
ttgcaatgga gcagtctgaa gcccctggac agcgcgtgt atttttgc gagacatgac 300
gtggatatt gcagtagttc caactgcgca aagtggctg aataacttcca gcattgggc 360
cagggcaccc tggtcaccgt ctccctcagg ggaggcgggt caggcggagg tggctctggc 420
ggtggcggat cgcaatctgt gttgacgcag ccgcctcag tgtctgcggc cccaggacag 480
aaggtcacca ttcctgctc tggaagcagc tccaaacattt ggaataatta tgtatcctgg 540
taccagcagc tcccaggaac agcccccaaa ctccatcatct atgatcacac caatcgcccc 600
gcaggggtcc ctgaccgatt ctctggctcc aagtctggca cctcagcctc cctggccatc 660
agtgggtcc ggtcccgagga tgaggctgtat tattactgtg ctcctggga ctacaccctc 720
tcgggctggg tggtcggcgg aggaaccaag ctgaccgtcc taggtgcggc cgcacaccat 780
catcaccatc acggtggtgg cggctgcctc gagtcctcta gctctggatc cgaaaaagat 840
gaactg 846

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<210> 40

<211> 287

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Human/murine
chimeric single chain binding polypeptide
(C6ML3-9sFv'-L2-KDEL)

<400> 40

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
1 5 10 15

Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
20 25 30

Trp Ile Ala Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Tyr Met
35 40 45

Gly Leu Ile Tyr Pro Gly Asp Ser Asp Thr Lys Tyr Ser Pro Ser Phe
50 55 60

Gln Gly Gln Val Thr Ile Ser Val Asp Lys Ser Val Ser Thr Ala Tyr
 65 70 75 80

Leu Gln Trp Ser Ser Leu Lys Pro Ser Asp Ser Ala Val Tyr Phe Cys
 85 90 95

Ala Arg His Asp Val Gly Tyr Cys Ser Ser Ser Asn Cys Ala Lys Trp
 100 105 110

Pro Glu Tyr Phe Gln His Trp Gly Gln Gly Thr Leu Val Thr Val Ser
 115 120 125

Ser Gly Gly Gly Ser Gly Gly Ser Gly Gly Gly Ser
 130 135 140

Gln Ser Val Leu Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln
 145 150 155 160

Lys Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Asn Asn
 165 170 175

Tyr Val Ser Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu
 180 185 190

Ile Tyr Asp His Thr Asn Arg Pro Ala Gly Val Pro Asp Arg Phe Ser
 195 200 205

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Phe Arg
 210 215 220

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ser Trp Asp Tyr Thr Leu
 225 230 235 240

Ser Gly Trp Val Phe Gly Gly Thr Lys Leu Thr Val Leu Gly Ala
 245 250 255

Ala Ala His His His His His Gly Gly Gly Cys Leu Glu Ser
 260 265 270

Ser Ser Ser Gly Ser Ser Ser Gly Ser Glu Lys Asp Glu Leu
 275 280 285

<210> 41
 <211> 861
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Human/murine
 chimeric single chain binding polypeptide
 (C6ML3-9sFv'-L2-KDEL)

<400> 41

caggtgcagc tgggtgcagtc tggggcagag gtgaaaaagc cgggggagtc tctgaagatc 60
 tcctgttaagg gttctggata cagcttacc agctactgga tcgcctgggt ggcgcagatg 120
 cccggaaag gcctggagta catggggctc atctatcctg gtgactctga caccaatac 180
 agccgccttcc tccaaggcca ggtcaccatc tcagtcgaca agtccgtcag cactgcctac 240
 ttgcaatgga gcagtctgaa gccctcgac agcgcgtgtt attttgcgac gagacatgac 300
 gtggatatt gcagtagttc caactgcgca aagtggctg aatacttcca gcattgggc 360
 cagggcaccc tggtcacccgt tcctcaggt ggaggcggtt caggcgagg tggctctggc 420
 ggtggcgat cgcagtcgtt gttgacgcag ccgcctcag tgtctgcggc cccaggacag 480
 aaggtcacca tctcctgcgc tggaaagcagc tccaacattt ggaataatta tgtatcctgg 540
 taccagcagc tcccaggaac agccccaaa tcctcatct atgatcacac caatcgcccc 600
 gcaggggtcc ctgaccgatt ctctggctcc aagtctggca cctcagcctc cctggccatc 660
 agtgggttcc ggtcccgagga tgaggctgat tattactgtg cctcctggga ctacaccctc 720
 tcgggctggg tggtcggcgg aggaaccaag ctgaccgtcc taggtgcggc cgcacaccat 780
 catcaccatc acggtggtgg cggctgcctc gagtctagca gtcgggttc ctctagctc 840
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<210> 42

<211> 296

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Human/murine
 chimeric single chain binding polypeptide
 (C6ML3-9sFv'-L2-H14)

<400> 42

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu
 1 5 10 15

Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
 20 25 30

Trp Ile Ala Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Tyr Met
 35 40 45

Gly Leu Ile Tyr Pro Gly Asp Ser Asp Thr Lys Tyr Ser Pro Ser Phe
 50 55 60

Gln Gly Gln Val Thr Ile Ser Val Asp Lys Ser Val Ser Thr Ala Tyr
 65 70 75 80

Leu Gln Trp Ser Ser Leu Lys Pro Ser Asp Ser Ala Val Tyr Phe Cys
 85 90 95

Ala Arg His Asp Val Gly Tyr Cys Ser Ser Ser Asn Cys Ala Lys Trp
 100 105 110

Pro Glu Tyr Phe Gln His Trp Gly Gln Gly Thr Leu Val Thr Val Ser
 115 120 125

Ser Gly Gly Gly Ser Gly Gly Ser Gly Gly Gly Ser
 130 135 140

Gln Ser Val Leu Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln
 145 150 155 160

Lys Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Asn Asn
 165 170 175

Tyr Val Ser Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu
 180 185 190

Ile Tyr Asp His Thr Asn Arg Pro Ala Gly Val Pro Asp Arg Phe Ser
 195 200 205

Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Phe Arg
 210 215 220

Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ser Trp Asp Tyr Thr Leu
 225 230 235 240

Ser Gly Trp Val Phe Gly Gly Thr Lys Leu Thr Val Leu Gly Ala
 245 250 255

Ala Ala His His His His Gly Gly Gly Cys Leu Glu Ser
 260 265 270

Ser Ser Ser Gly Ser Ser Ser Gly Ser Lys Lys Ser Ala Lys Lys
 275 280 285

Thr Pro Lys Lys Ala Lys Lys Pro
 290 295

<210> 43

<211> 888

<212> DNA

<213> Artificial Sequence

13
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<220>

<223> Description of Artificial Sequence:Human/murine
chimeric single chain binding polypeptide
(C6ML3-9sFv'-L2-H14)

<400> 43

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tcctgttaagg gttctggata cagctttacc agctactgga tcgcctgggt gcccagatg 120
cccgaaaaag gcctggagta catggggctc atctatcctg gtgactctga caccaatac 180
agccccgtcct tccaaggcca ggtcaccatc tcagtcgaca agtccgtcaq cactgcctac 240
ttgcaatgga gcagtctgaa gccctcgac agcgcgggtt attttgcgac gagacatgac 300
gtggatatt gcagtagttc caactgcgca aagtggctg aataacttcca gcattgggc 360
cagggcaccc tggtcaccgt ctccctcagggt ggaggcgggtt cagggcggagg tggctctggc 420
ggtggcggat cgcagtcgtt gttgacgcag ccgcctcag tgtctgcggc cccaggacag 480
aaggtcacca tctccctgcgc tggaagcagc tccaaacattt ggaataatta tgtatcctgg 540
taccagcagc tcccaggaac agccccaaa ctccatct atgatcacac caatcgcccc 600
gcaggggtcc ctgaccgatt ctctggctcc aagtctggca cctcagcctc cctggccatc 660
agtgggttcc ggtccgagga tgaggctgtat tattactgtg cctcctggga ctacaccctc 720
tcgggctggg tggtcggcgg aggaacccaag ctgaccgtcc taggtgcggc cgcacaccat 780
catcaccatc acggtgttgg cggctgcctc gagtctagca gctccgggttc ctctagctct 840
ggatccaaga aaagcgcgaa aaagaccccg aagaaagcga agaaacccg 888

<210> 44

<211> 291

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Human/murine
chimeric single chain binding polypeptide
(C6ML3-9sFv'-L2-nls)

<400> 44

Gln	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys	Pro	Gly	Glu
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				20				25				30			
Trp	Ile	Ala	Trp	Val	Arg	Gln	Met	Pro	Gly	Lys	Gly	Leu	Glu	Tyr	Met
				35				40				45			
Gly	Leu	Ile	Tyr	Pro	Gly	Asp	Ser	Asp	Thr	Lys	Tyr	Ser	Pro	Ser	Phe
					50			55			60				
Gln	Gly	Gln	Val	Thr	Ile	Ser	Val	Asp	Lys	Ser	Val	Ser	Thr	Ala	Tyr

65	70	75	80
Leu Gln Trp Ser Ser Leu Lys Pro Ser Asp Ser Ala Val Tyr Phe Cys			
85		90	95
Ala Arg His Asp Val Gly Tyr Cys Ser Ser Ser Asn Cys Ala Lys Trp			
100	105		110
Pro Glu Tyr Phe Gln His Trp Gly Gln Gly Thr Leu Val Thr Val Ser			
115	120		125
Ser Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser			
130	135		140
Gln Ser Val Leu Thr Gln Pro Pro Ser Val Ser Ala Ala Pro Gly Gln			
145	150	155	160
Lys Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Ile Gly Asn Asn			
165	170		175
Tyr Val Ser Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu			
180	185		190
Ile Tyr Asp His Thr Asn Arg Pro Ala Gly Val Pro Asp Arg Phe Ser			
195	200		205
Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Phe Arg			
210	215		220
Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ser Trp Asp Tyr Thr Leu			
225	230	235	240
Ser Gly Trp Val Phe Gly Gly Thr Lys Leu Thr Val Leu Gly Ala			
245	250		255
Ala Ala His His His His Gly Gly Gly Cys Leu Glu Ser			
260	265		270
Ser Ser Ser Gly Ser Ser Ser Gly Ser Thr Pro Pro Lys Lys Lys			
275	280		285
Arg Lys Val			
290			

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<211> 873
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<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Human/murine
chimeric single chain binding polypeptide
(C6ML3-9sFv'-L2-nls)

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<400> 49

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C-terminal*
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Ser Glu Lys Asp Glu Leu
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